

What is Claimed is:

1. A spectacle lens machining apparatus, comprising:

a lens holding unit provided with a lens holding shaft which is a turnable shaft and which has a mechanism of holding a spectacle lens being machined at a center of the lens in such a manner that a direction of said shaft intersects a lens optical surface, and also provided with a turn driving mechanism which drives said lens holding shaft so as to turn according to a predetermined machining command information, thereby rotating said spectacle lens about the center of the spectacle lens to move a machined position of a circumferential edge of the spectacle lens;

a lens machining mechanism provided with a revolving machining tool which edges the circumferential edge of said spectacle lens being machined that is held by said lens holding unit according to the predetermined machining command information, to machine the spectacle lens to a predetermined spectacle frame shape; and

a control information processing apparatus which has a function of sending necessary information including the predetermined machining command information to said lens holding unit and said lens machining mechanism to control their operations,

wherein said control information processing apparatus has a machining condition setting function of setting machining conditions according to a lens thickness and a lens material, the machining conditions including a revolving speed of the revolving machining tool of said lens machining mechanism and a turning speed of the lens holding shaft of said lens holding unit.

2. A spectacle lens machining apparatus, comprising:

a lens holding unit provided with a lens holding shaft which is a turnable shaft and which has a mechanism of holding a spectacle lens being machined at a center of the lens in such a manner that a direction of said shaft intersects a lens optical surface, and also

provided with a turn driving mechanism which drives said lens holding shaft so as to turn according to a predetermined machining command information, thereby rotating said spectacle lens about the center of the spectacle lens to move a machined position of a circumferential edge of the spectacle lens;

a lens machining mechanism provided with a revolving machining tool which edges the circumferential edge of said spectacle lens being machined that is held by said lens holding unit according to the predetermined machining command information, to machine the spectacle lens to a predetermined spectacle frame shape; and

a control information processing apparatus which has a function of sending necessary information including the predetermined machining command information to said lens holding unit and said lens machining mechanism to control their operations, wherein

said control information processing apparatus has a machining condition varying function of setting different machining conditions for rough machining of the circumferential edge of said spectacle lens being machined and for finishing machining after the rough machining by varying a revolving speed of the revolving machining tool of said lens machining mechanism and/or a turning speed of the lens holding shaft of said lens holding unit.

3. A spectacle lens machining method of machining a spectacle lens using a spectacle lens machining apparatus which includes:

a lens holding unit provided with a lens holding shaft which is a turnable shaft and which has a mechanism of holding a spectacle lens being machined at a center of the lens in such a manner that a direction of said shaft intersects a lens optical surface, and also provided with a turn driving mechanism which drives said lens holding shaft so as to turn according to a predetermined machining command information, thereby rotating said

spectacle lens about the center of the spectacle lens to move a machined position of a circumferential edge of the spectacle lens;

a lens machining mechanism provided with a revolving machining tool which edges the circumferential edge of said spectacle lens being machined that is held by said lens holding unit according to the predetermined machining command information, to machine the spectacle lens to a predetermined spectacle frame shape;

a groove machining apparatus provided with a revolving machining tool which machines, according to the predetermined machining command information, a groove in an end surface of the circumferential edge of the spectacle lens being machined that has been machined to the predetermined spectacle frame shape by said lens machining mechanism; and

a control information processing apparatus which has a function of sending necessary information including the predetermined machining command information to said lens holding unit, said lens machining mechanism, and said groove machining apparatus to control their operations,

wherein when the groove is machined in the end surface of the circumferential edge of said spectacle lens being machined by said groove machining apparatus, a machining condition is varied according to a material type of said spectacle lens being machined by varying a revolving speed of said revolving machining tool and/or a turning speed of the lens holding shaft of the lens holding unit which holds said spectacle lens being machined.

4. A spectacle lens machining method of machining a spectacle lens using a spectacle lens machining apparatus which includes:

a lens holding unit provided with a lens holding shaft which is a turnable shaft and which has a mechanism of holding a spectacle lens being machined at a center of the lens in such a manner that a direction of said shaft intersects a lens optical surface, and also

provided with a turn driving mechanism which drives said lens holding shaft so as to turn according to a predetermined machining command information, thereby rotating said spectacle lens about the center of the spectacle lens to move a machined position of a circumferential edge of the spectacle lens;

a lens machining mechanism provided with a revolving machining tool which edges the circumferential edge of said spectacle lens being machined that is held by said lens holding unit according to the predetermined machining command information, to machine the spectacle lens to a predetermined spectacle frame shape;

a chamfering apparatus provided with a revolving machining tool which chamfers, according to predetermined command information, edges where the end surface of the circumferential edge and the lens optical surface intersect in the spectacle lens being machined that has been machined to the predetermined spectacle frame shape by said lens machining mechanism; and

a control information processing apparatus which has a function of sending necessary information including the predetermined machining command information to said lens holding unit, said lens machining mechanism, and said chamfering apparatus, to control their operations, wherein,

when said chamfering apparatus chamfers the edges where the end surface of the circumferential edge and the lens optical surface intersect in said spectacle lens being machined, a machining condition is varied according to material type of said spectacle lens being machined by varying at least one of a revolving speed of said revolving machining tool performing said chamfering and a turning speed of the lens holding shaft of the lens holding unit which holds said spectacle lens being machined.